Recovery Plan Action Status

Plan Name: Recovery Plan for Gabbro Soil Plants of the Central Sierra Nevada Foothills

Plan Status: Final Plan Date: 30-Aug-02 Lead Agency: USFWS

Lead Office: Sacramento Fish And Wildlife Office 414-6600)

| Species | Action Priority # | Action # | Action Description | Action Status | Est. Initiation Date | Est. Completion Date | Responsible Parties | Work Type | Labor Type | Action Comments |
|---|-------------------|----------|--|------------------------|----------------------|-------------------------|---|----------------------------------|---|--|
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 1.1 | Establish cooperative programs with participants from the public and private sector. | Ongoing Not Current | FY 2000 - FY 2004 | | U.S. Fish and Wildlife Service, California Department of Fish and Game | Other: Information and Education | Contract, Internal Administrative, Internal Technical Assistance | Cost depends on interest and availability of partners. |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 1.2.1 | Develop and implement outreach plans. | Ongoing Not Current | FY 2000 - FY 2004 | | U.S. Fish and Wildlife Service | Other: Information and Education | Contract, Internal Administrative, Internal Technical Assistance | Total costs depend on scope of future outreach needs. In 2000 a \$55,900 section 6 grant to CDFG was used to fund outreach & education. |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 1.2.2 | Develop and implement economic and other incentives. | Not Started | | | El Dorado County, California, Nevada County, California, U.S. Fish and Wildlife Service, California Department of Fish and Game, Private landowners | Other | Contract, Internal Administrative, Internal Technical Assistance | Cost depends on scope and nature of incentives |

| Species | Action Priority # | Action # | Action Description | Action Status | Est. Initiation Date | Est. Completion Date | Responsible Parties | Work Type | Labor Type | Action Comments |
|---|-------------------|----------|---|------------------------|----------------------|-------------------------|--|---------------------------|---|---|
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 2.1.3 | Protect and secure Pine Hill preserve for multiple species. | Partially Complete | Prior to FY 1995 | | El Dorado County, California, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game, California Department of Forestry and Fire Protection, Private landowners | Acquisition: Fee Title | Contract | About 154 hectares (380 acres) in public ownership. Cost estimate is for securing and protecting approximately 241 hectares (595 acres) |
| Stebbins' morning- glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 2.2.3 | Protect and secure Grass Valley preserve for Calystegia stebbinsii and decumbent Fremontodendron. | Not Started | | | Nevada County, California, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Private landowners | Acquisition: Fee Title | Contract, Internal Technical Assistance | Preserved area should include decumbent Fremontodendron, unless it is determine not to be the listed Fremontodendron. Cost will depend on taxonomic findings. |
| Layne's butterweed (Senecio layneae), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 2.2.4 | Protect and secure area southwest of Brownsville for Senecio layneae and decumbent Fremontodendron. | Not Started | | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Private landowners | Other: Law Enforcement | Internal Technical Assistance | Estimated cost is in the cost for designating land as an ACEC, preserved area should include decumbent Fremontodendron, unless it is determine not to be the listed Fremontodendron. |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 3.1 | Establish a funding mechanism for long-term maintenance and management of the Pine Hill formation preserves in perpetuity. | Ongoing Not Current | FY 2000 - FY 2004 | | American River Conservancy, El Dorado County, California, El Dorado Irrigation District, U.S. Bureau of Land Management, U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, California Department of Fish and Game, California Department of Forestry and Fire Protection | Management: Other | Contract, Internal Technical Assistance | Federal and state partners will assist in 30 percent of management costs. Costs will depend on management. The needed, frequency of fire, details of management plan in Task 3.3. The intention is to have an endowment set up to fund the preserve manager |

| Species | Action Priority # | Action # | Action Description | Action Status | Est. Initiation Date | Est. Completion Date | Responsible Parties | Work Type | Labor Type | Action Comments |
|---|-------------------|----------|--|-----------------|----------------------|-------------------------|--|--|---|--|
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 3.2 | Hire preserve manager for the Pine Hill formation | Complete | FY 2000 - FY 2004 | FY 2006 | El Dorado County, California, U.S. Fish and Wildlife Service | Management: Other | Contract, Internal Technical Assistance | |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 3.3 | Prepare management plans and implement appropriate management in areas inhabited by special status species. | Ongoing Current | Prior to FY 1995 | | American River Conservancy, El Dorado County, California, California Native Plant Society, Nevada County, California, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Eldorado National Forest, California Department of Fish and Game | Management, Management: Planning | Assistance | The Pine Hill Preserve Management Plan was completed in July 2008. There are problems implementing Management in Cameron Park. |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 3.4.2 | Establish monitoring techniques and protocol for habitat monitoring. | Ongoing Current | FY 2008 | | El Dorado County, California, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Eldorado National Forest, California Department of Fish and Game | Research: Other Information | Internal Field Assistance, Internal Technical Assistance | |

| Species | Action Priority # | Action # | Action Description | Action Status | Est. Initiation Date | Est. Completion Date | Responsible Parties | Work Type | Labor Type | Action Comments |
|---|-------------------|----------|---|-----------------|----------------------|-------------------------|---|--|---|--|
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 3.5 | Perform baseline monitoring at all areas identified for preservation. | Ongoing Current | FY 2006 | | El Dorado County, California, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Eldorado National Forest, California Department of Fish and Game | Research: Population Surveys | Internal Field Assistance, Internal Technical Assistance, Volunteer | Baseline monitoring will be done during the closest appropriate field season to acquisition of habitat/conservation easement, but it may take 10 years to acquire the habitat. Costs depend on which lands are acquired and need monitoring. |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 3.6 | Develop and implement monitoring plans for special status species populations and habitat in all areas being proposed for preservation. | Unknown | | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Management: Planning | Internal Field Assistance, Internal Technical Assistance | Implementation costs depend on land acquisition, survey methods identified in monitoring plan and adaptively updated in response to management. |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 4.1 | Establish a survey program and protocols for all species covered in the recovery plan. | Ongoing Current | FY 2006 | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, Eldorado National Forest, California Department of Fish and Game | Research: Other Information, Research: Population Surveys | Internal Field Assistance, Internal Technical Assistance | |

| Species | Action Priority # | Action # | Action Description | Action Status | Est. Initiation Date | Est. Completion Date | Responsible Parties | Work Type | Labor Type | Action Comments |
|---|-------------------|----------|---|--------------------|----------------------|-------------------------|--|--|--|--|
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 4.2.1 | Conduct general surveys | Ongoing Current | FY 2005 | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Population Surveys | Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert | These surveys will be conducted as preserves are acquired. Habitat acquistion may take 10 or more years for some sites; costs depend on timing and area acquired. Included in implementation of task 3.6 |
| Stebbins' morning- glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 4.2.2.5 | Survey potential habitat on serpentine and gabbro soils in Nevada County. | Unknown | | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Habitat Status, Research: Population Surveys | Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert | For Calystegia stebbinsii and possibly Fremontodendron californicum ssp. decumbens. |
| Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 5.1 | Throughout the species' range: Develop plant propagation techniques for listed species and species of concern for which repatriation or introductions would be appropriate. | Partially Complete | FY 2007 | | Rancho Santa Ana Botanic Garden, El Dorado County, California, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Propagation | Internal Field Assistance, Internal Technical Assistance | Currently not thought to be appropriate for Wyethia reticulata or Senecio layneae |
| Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 5.14 | Identify decumbent Fremontodendron located in Yuba County. | Partially Complete | FY 2000 - FY 2004 | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Taxonomic Studies | Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert | Study ongoing if Fremontodendron californicum ssp. decumbens, demographic studies should be performed. |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), Stebbins' morningglory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 5.4 | Conduct necessary demographic studies at the Cameron Park preserve. | Not Started | | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Competition, Research: Demographic Studies | Contract, Internal Field Assistance, Internal Technical Assistance | Senecioo layneae, Ceanothus roderickii, Galium californicum ssp. sierrae, Wyethia reticulata |

| Species | Action Priority # | Action # | Action Description | Action Status | Est. Initiation Date | Est. Completion Date | Responsible Parties | Work Type | Labor Type | Action Comments |
|---|-------------------|----------|--|------------------------|----------------------|-------------------------|---|---|---|--|
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 5.7 | Conduct necessary research at the Pine Hill preserve | Partially Complete | FY 1995 - FY 1999 | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Genetics, Research: Taxonomic Studies | Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert | Genetics- Senecio layneae and potentially Ceanothus roderickii; Systematics - Ceanothus roderickii; disease assessment and study- Fremontodendron californicum ssp. decumbens. |
| El Dorado bedstraw (Galium californicum ssp. sierrae), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 1 | 6.1.1 | Collect and store viable seed for Fremontodendron californicum ssp. decumbens and Galium californicum ssp. sierrae | Ongoing Not Current | FY 2000 - FY 2004 | | Rancho Santa Ana Botanic Garden, University of California at Berkeley, U.S. Bureau of Land Management, U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, California Department of Fish and Game | Research: Other Information, Research: Propagation, Research: Reintroduction | Contract, Internal Field Assistance, Internal Technical Assistance | Contract has been transferred to BOR, Central Valley Project Conservation Program. |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | | 6.2 | Initiate enhancement, repatriation, or introductions where appropriate. | Ongoing Current | FY 2008 | | U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, California Department of Fish and Game | Management: Other, Management: Reintroduction | Internal Field Assistance | Costs dependent on determined need for action. Lead party will depend on local land ownership. |
| Layne's butterweed (Senecio layneae), Pine Hill ceanothus (Ceanothus roderickii), El Dorado bedstraw (Galium californicum ssp. sierrae), Stebbins' morning-glory (Calystegia stebbinsii), Pine Hill flannelbush (Fremontodendron californicum ssp. decumbens) | 2 | 8 | Perform metapopulation- type analysis. | Not Started | | | U.S. Geological Survey, Biological Resources Division, U.S. Fish and Wildlife Service | Research: Genetics, Research: Migration, Research: Other Information | Contract, Internal Field Assistance | |